## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Harumitsu MIYASHITA et al.

Group Art Unit: 2655

Appln No.: 10/626,607 (Continuation of 09/984,351)

Examiner: Gautam Patel

Filed : July 25, 2003

: WAVEFORM EQUALIZER FOR A REPRODUCTION SIGNAL

OBTAINED BY REPRODUCING MARKS AND NON-MARKS

RECORDED ON A RECORDING MEDIUM

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents Alexandria, VA. 22313-1450

Sir:

For

Pursuant to the duty of disclosure set forth in 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §1.97 and §1.98, the following documents, which were cited during the prosecution of parent application No. 09/984,351, are brought to the attention of the Examiner:

In the Information Disclosure Statement filed on March 4, 2002, the following documents were cited:

U.S. Patent No. 5,857,002, to MELAS, which issued on January 5, 1999;

Japanese Laid-Open Patent Publication No. 2000-123487, to MARUKAWA, published on April 28, 2000, which is discussed on page 6 of Applicants' specification, together with an English language abstract. The publication date is noted to be incorrectly indicated as April 20, 2000 on the English language Abstract.

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Hideki NAKAMURA et al., "High Density Optical Disk System Using New 3-15 Modulation", ITE Technical Report, Vol. 24, No. 46, Pages 13-18, MMS2000-14, July 2000, which is discussed on pages 5-6 of Applicants' specification;

G. David FORNEY, JR., "Maximum-Likelihood Sequence Estimation of Digital Sequences in the Presence of Intersymbol Interference", IEEE Transactions on Information Technology, Vol. IT-18, No. 3, pp 363-378, May 1972; and

Tsuyoshi OKI et al., "New Signal Processing System for High Density Optical Disk", ITE Technical Report, Vol. 24, No. 4, VIR2000-5, pages 27-32, January 20, 2000.

In an Office Action that was mailed on April 15, 2003, the following documents were cited by the Examiner:

- U.S. Patent No. 6,480,447, to WAKABAYAHI et al, which issued on November 12, 2002;
- U.S. Patent No. 6,324,030, to CHEUNG et al, which issued on November 27, 2003;
- U.S. Patent No. 6,192,016, to KIM, which issued on February 20, 2001;
- U.S. Patent No. 6,519,715, toTAKASHI et al, which issued on February 11, 2001;
- U.S. Patent No. 6,449,110, to DEGROAT et al, which issued on September 10, 2002;
- U.S. Patent No. 6,141,167, to NISHIDA et al, which issued on October 31, 2000;
- U.S. Patent No. 5,970,091, to NISHIDA et al, which issued on October 19, 1999;

Applicants note that copies of the above cited documents are present in parent Application No. 09/984,351. Accordingly, pursuant to 37 C.F.R. §1.98(d) copies of the documents are not being submitted herewith, and the Examiner is invited to review and consider the documents in the parent

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application. Of course, should any of the documents not be readily available to the Examiner, the

Examiner is requested to contact the undersigned and additional copies will be submitted.

For the convenience of the Examiner, the above-noted documents cited in the parent

application are listed on the attached Forms PTO-1449. The Examiner is requested to initial the

Forms PTO-1449, and to return the initialed copy with the next communication from the U.S. Patent

and Trademark Office.

Applicants also bring to the Examiner's attention the following copending and commonly

assigned patent application:

U.S. Divisional Patent Application No. 10/405,626 to MIYASHITA et al., entitled "Equalizer

and PRML Detector", which was filed on April 3, 2003. Applicants note that this application is a

divisional of above-mentioned parent Application No. 09/984,351.

In accordance with 37 C.F.R. §1.98(a)(2)(iii), a copy of the above-mentioned application is

attached hereto. The Examiner is invited to review the file wrapper of this U.S. patent application

at the U.S. Patent and Trademark Office and the references of record, if any, cited therein.

Should the Examiner have any questions or comments regarding this matter, the undersigned

may be contacted at the below-listed telephone number.

October 27, 2003

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Respectfully submitted,

H. MIYASHITA et al.

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Bruce H. Bernstein

Reg. No. 29,027

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U.S. Department of Commerce Patent and Trademark Office

Atty. Docket No. P23828

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